Pacific Coastal Salmon Recovery Program

Introduction

Congress created the Pacific Coastal Salmon Recovery Program (PCSRP) in 2000 to provide critically needed assistance to tribes as participants in growing salmon recovery efforts in the region. Recognizing the need for flexibility among tribes to respond to salmon recovery priorities in their watersheds, Congress earmarked the funds for salmon habitat restoration, salmon stock enhancement, salmon research, and implementation of the 1999 Pacific Salmon Treaty Agreement and related agreements. This report summarizes the important work these much-needed funds are supporting to restore healthy and wild salmon runs to western Washington.

Policy Development

Wild salmon have always been vital to sustaining tribal cultures and economies, a fact that is no less true today than it was in the 1850s when the tribes' treaties were negotiated with the United States. Because of the central role salmon play in the health of their communities, the tribes secured the continued right to harvest wild salmon in exchange for vast lands and resources now enjoyed by millions of non-Indians. While unequivocally affirmed by the U.S. Supreme Court, the United States' treaty promises ring increasingly hollow as wild salmon continue to disappear from the Pacific Northwest.

Past over-harvesting and over-dependence on hatcheries have contributed to the disappearance of wild salmon. Tribes have worked diligently over the past three decades to improve and reform harvest and hatchery management. These efforts have been successful in slowing the loss of wild salmon, but stocks have not – and cannot – rebound with these actions alone. Experts have concluded that loss and degradation of freshwater and estuarine spawning and rearing habitat in the tribes' ceded territory have been, and continue to be, the major causes of decline.

Habitat degradation began over a century ago, but over the past 30 years a huge population influx around the Puget Sound – with its accompanying development, pollution, and increased demand for water – has begun to decimate much of what remains of the region's once highly productive salmon habitat. Growth in the region is expected to continue, creating the urgent need to take meaningful steps to protect and restore ecosystems that support salmon and other life.

In 1999, Puget Sound chinook, Hood Canal/Strait of Juan de Fuca summer chum and Lake Ozette sockeye salmon were listed as "threatened" under the Endangered Species Act (ESA). Today, salmon restoration efforts in western Washington – indeed, all salmon management here – must be conducted with the ESA as its backdrop.

The ESA is the filter through which must pass all salmon recovery plans in western Washington. The ESA isn't the starting point for salmon restoration – the state and tribes have been working on restoration efforts for decades. Nor is ESA the end point. Tribal salmon restoration efforts won't conclude until there are healthy wild fish populations to support harvest by both Indian and non-Indian fishermen.

Western Washington tribes are leaders in the salmon recovery effort. The tribes possess the legal authority, technical and policy expertise, and effective programs to address impacts on wild salmon from harvest and hatcheries. Over the past three decades, in response to dwindling populations and a commitment to sustainable fisheries, the tribes and State of Washington have worked together as co-managers of the resource, modifying and reducing harvests to protect individual populations of salmon. Harvest levels have been cut dramatically – by as much as 80-90 percent in some cases – at great cost to the spiritual, cultural and economic well-being of the tribes. Harvest reductions alone, however, cannot make up for the loss of wild salmon production caused by lost and degraded spawning and rearing habitat.

Through hatchery reform efforts now under way, the treaty tribes and State of Washington are drawing upon state-of-the-art science to minimize the impacts of artificial propagation on wild salmon. For each of their chinook hatcheries, tribes have completed Hatchery Genetic Management Plans. These plans, along with those completed by the Washington Department of Fish and Wildlife for its chinook hatcheries, form the basis of a conservation plan that NOAA Fisheries will consider for Section 4(d) coverage under the Endangered Species Act. Section 4(d) prohibits taking a listed salmon or steelhead, except in cases where the take is associated with an approved program.

Tribal governments have made strides to protect salmon habitat, both on their reservations through land use and water resource authorities and off-reservation by collaborating with non-Indian neighbors to protect and restore watersheds that support salmon.

At the forefront of the struggle for salmon recovery in western Washington is the Shared Strategy. This four-year-old effort by tribal, federal, state and local governments and private sector leaders is aimed at creating healthy ecosystems to produce and support wild salmon at a level that will once again sustain commercial, ceremonial and subsistence harvest.

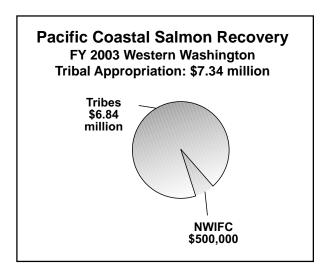
The Shared Strategy is not a top-down approach to wild salmon recovery, but rather a cooperative effort that links ongoing wild salmon recovery initiatives at the tribal, state, federal and local levels to create a plan that is viable and cost-effective. It establishes, organizes and manages these links; identifies necessary long and short-term actions and coordinates funding needs; and proposes laws or policies needed to support wild salmon recovery. Much has been accomplished. The Shared Strategy has an ambitious timeline and is on track to deliver a draft recovery plan by June 2005. Key to the Shared Strategy's potential for success is the endorsement and participation in the process by the National Marine Fisheries Service (NMFS), the federal agency responsible for implementing the ESA and for overseeing recovery efforts for listed species.

Despite these efforts, however, the tribes' salmon recovery strategies continue to be hamstrung by insufficient resources. With listings of the tribes' treaty-protected salmon under the Endangered Species Act, the region's recovery activities threaten to overwhelm tribal resources. The tribes' meaningful participation in these complex and resource-intensive efforts to protect and restore treaty-protected salmon resources is critical to their success.

Funding Distribution

In FY 2003, western Washington treaty Indian tribes received \$7.34 million in PCSRP funding for their continued participation in salmon recovery efforts. Each of the 20 tribes received \$342,500, with \$500,000 earmarked by the tribes for coordinating efforts by the NWIFC. As of this writing, Congress had not yet appropriated funding for FY 2004. The tribes are seeking at least status quo funding of \$9 million for this fiscal year.

Working closely with NMFS, the tribes have established efficient application and reporting requirements through the NWIFC to ensure accountability and the achievement of congressional and tribal salmon recovery goals.



FY 2003 Allocation Of Pacific Coastal Salmon Recovery Program Funds

StatesWashingtonOregonAlaskaCalifornia\$28 million\$14 million\$22 million\$14 million

\$7.34 million

Sub-Total \$78 million

Tribes Columbia River U.S

\$3 million

Sub Total: \$12 million

Total: \$90 million

U.S. v. Wash.
Case Area
Other Pacific Coastal Tribes
\$1.66 million

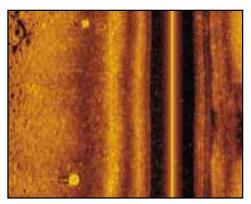
Implementation

Consistent with congressional intent, salmon recovery funding agreements allow the tribes flexibility in identifying for themselves salmon recovery priorities for tribal watersheds, governments and communities. At the same time, the tribes' efforts are connected through the NWIFC by overall strategies and efforts to most efficiently and effectively advance western Washington salmon recovery efforts. The NWIFC has re-directed resources and is using its base capabilities in a manner that advances these initiatives. Tribal proposals are reviewed and monitored by NWIFC technical and policy staff to ensure each provides sustainable and measurable benefits for salmon and their habitats. In addition, local and regional recovery efforts are analyzed and tracked to support the tribes' participation in shaping the direction of salmon recovery. It is on these two levels – the local level where watershed protections and improvements are being established to restore salmon runs and salmon habitat, and the regional level where state, federal and tribal leaders are collaborating to define goals and develop regional strategies – where salmon recovery is playing out in western Washington.

Accomplishments

Because each tribe has slightly different staffing patterns, due in part to differential funding, historic fishing practices and geography, each tribe is utilizing the funding in ways unique to its needs. Some tribes are using the monies to supplement ongoing salmon recovery efforts, while others are undertaking new projects to protect, preserve and enhance the salmon resource.

Following are several examples of some tribal salmon recovery projects being conducted with FY 2003 Pacific Coastal Salmon Recovery funds. Most tribal salmon recovery efforts are conducted in cooperation with state, local, federal of private sector entities to more effectively utilize limited tribal resources. All are part of comprehensive programs being conducted by the tribes to achieve wild salmon recovery.



A commercial crab pot (lower rounded image) and recreational crab pot (upper image) are displayed in this sonar image. *Photo: Natural Resources Consultants*

Stillaguamish Tribe:

Sometimes called "ghost nets," the abandoned fishing gear lurking in Northwest waters lives up to the nickname: derelict gillnets and crab pots are both hard to see and scary for scuba divers, boaters and fishermen. Floating freely, nets can trap and drown divers, foul propellers and otherwise threaten human safety. Most haunted by these discarded relics, though, are the area's fish and crab. Modern technology has produced monofilament nets that don't decompose, and can continue to trap fish, birds and other wildlife for years.

The Stillaguamish Tribe is working to remove those threats. A new effort by the tribe will identify and remove derelict nets and other gear in the Port Susan area. The project, which is funded with Coastal Salmon Recovery dollars, looks to remove the more dangerous gillnets first.

"My main concerns are the amount of wildlife killed in derelict nets and the risks this poses for people using Port Susan, like fishermen," said Jen Sevigny, a wildlife biologist coordinating the project for the Stillaguamish Tribe. "This is a serious issue for all wildlife, but especially for threatened bird species such as the marbled murrelet and threatened fish species like chinook salmon."

"Derelict crab pots aren't as big a threat to humans, but we're interested in removing them to protect the ecosystem," said Shawn Yanity, Stillaguamish tribal vice-chairman and fisheries manager. "As long as they're in the water, they're killing fish and crab. Removing them protects marine resources and improves habitat for salmon, including chinook."

Protecting those resources becomes all the more important when species, such as the murrelet and chinook, are federally protected. Both species are listed as "threatened" under the Endangered Species Act.

The project uses advanced technology to catalog where the gear exists: high-resolution "side scan" sonar produces detailed images of the underwater environment, showing precisely where the ghost nets rest. "The data gathered from these efforts will be valuable in and of itself, in two ways," said Pat Stevenson, environmental director with the Stillaguamish Tribe. "First of all, the sonar information will give us a clearer picture of the types of habitat in Port Susan. Also, any species killed by these nets represent mortality that fisheries planners aren't able to plan for. Finding out what impacts derelict gear is having in Port Susan will only help our fisheries management efforts."

Port Gamble S'Klallam Tribe:

Using a small net, Greg Sullivan scoops the remaining salmon from a smolt trap's holding tank and counts his catch before releasing the juvenile fish back into the river. "That's the last of them for today," says the Port Gamble S'Klallam Tribe's natural resources technician, who checks the trap on the Hamma Hamma River twice a week. "That makes 1,253 juvenile salmon. By far the most I've seen here at one time."

That's a good sign. The more fish that show up in the smolt trap's tank, the more accurate of a count the tribe can get on how many juvenile salmon – or smolts – are migrating from the freshwater of the Hamma Hamma River into the saltwater of Hood Canal. The smolt trap is part of a Pacific Coastal Salmon Recovery-funded project conducted by the Port Gamble and Skokomish tribes, a local landowner, Long Live the Kings, the Hood Canal Salmon Enhancement Group and the Washington Department of Fish and Wildlife.



A natural resources technician for the Port Gamble S'Klallam Tribe counts juvenile salmon at a smolt trap on the Hamma Hamma River. *Photo: D. Friedel*

The smolt trap is a large, water-powered device that safely catches young salmon, allowing the fish to be studied and returned to the river unharmed. It's anchored near the shore of the river just below the site where a tributary reaches the mainstem of the Hamma Hamma.

"The level of smolt production from the river is important because it reflects the quantity and quality of freshwater salmon habitat available in the watershed," said Cindy Gray, Port Gamble S'Klallam finfish manager. "That information will help us forecast future adult salmon returns and determine what is best for this river in terms of harvest management, stock enhancement and habitat restoration. It's not enough to just know how many salmon return to the river, we need to know how many are leaving, especially Hood Canal summer chum."

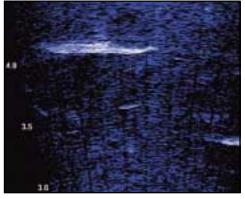
Along with Puget Sound chinook salmon and Lake Ozette sockeye, Hood Canal summer chum are listed as "threatened" under the federal Endangered Species Act. The information collected about the summer chum salmon population on the Hamma Hamma River will go a long way toward helping the species rebound in the Puget Sound region. Declining chinook, pink and coho salmon, along with steelhead populations, also will be studied.

Puyallup Tribe:

When salmon start returning in the fall, the Puyallup River is obscured by a chalky mix of glacial till, making it almost impossible for the adult spawning salmon to be seen. This poses a problem for salmon managers who would like to count every fish.

Starting this year, with the aid of Pacific Coastal Salmon Recovery funding, the Puyallup Tribe of Indians will use Dual Frequency Identification Sonar (DIDSON) – an advanced sonar system – to peer though the murk.

"If there is a larger population spawning in the glacial mainstem that we can't see, that is something we really want to know," said Russ Ladley, habitat biologist for the tribe. "It will also help us understand the salmon run's timing a lot better."



Highly accurate DIDSON sonar is being used to count salmon returning to the Puyallup River system.

Photo: University of Washington

Images presented by the DIDSON system are black and white and are incredibly accurate compared to other types of sonar. "You don't just see blobs or blips floating by, you actually see fish," said Ladley. The images are so accurate that we will even be able to tell the difference between species.

"Tracking salmon populations over the years is some of the most basic and important work salmon managers can do," said Ladley.



Quileute fisheries technicians survey the Sol Duc River for spawning steelhead. *Photo: D. Preston*

Quileute Tribe:

On a sunny, 75-degree May day, Rueben Flores and his fellow fisheries technicians survey a stretch of the Sol Duc River for steelhead egg nests, or redds.

The surveys for steelhead began in March and continued through June, providing critical data for tribal and state fisheries managers, such as numbers of successfully spawning fish and the condition of their habitat. As waters recede in the early summer months, the surveyors walk stretches of river where it is too shallow to float.

The Quileute Tribe conducts similar surveys for coho and chinook salmon on the Sol Duc as well as coho, chinook and steelhead in the Bogachiel, Calawah and Dickey river drainages. Sockeye surveys

are conducted in and around Lake Pleasant, and that means tribal crews are surveying for salmon redds from August through June. "The tribe and state do some helicopter surveys of redds, but the boat and walking surveys provide the ground truth of those observations," said Roger Lien, fisheries biologist for the Quileute Tribe.

Future Funding Needs

The need for tribal resources is critically important as the region moves forward to develop a comprehensive salmon recovery plan through the Shared Strategy, a process that cannot succeed without meaningful tribal participation at all levels. In addition, tribes need resources to ensure recovery efforts in their watersheds are robust. Tribes are essential partners in salmon recovery, with needs that generally fall into three categories: infrastructure for policy and planning; regional integration and technical assistance; and restoration projects to protect and rebuild salmon habitat. Backed by solid systems of accountability and a strong strategic coordinating function provided by their NWIFC, the tribes ensure that salmon recovery resources directly benefit the salmon.

Pacific Coastal Salmon Recovery funding provided to western Washington tribes from FY 2000 to FY 2003 has enabled the tribes to begin realizing their appropriate role as central participants in wild salmon recovery efforts. Full participation in this long-term effort will be dependent on adequate future funding.

For FY 2004, the treaty tribes in western Washington are seeking at least \$9 million in Pacific Coastal Salmon Recovery Project funding to help further bridge huge unmet needs for building internal capacity. This funding will enable tribes to continue critical work on watershed assessments that include assessing habitat conditions, conducting in-stream flow studies, and analyzing water quality and quantity factors related to salmon productivity. Other types of salmon restoration projects and activities that could be conducted include projects to address factors limiting salmon production in watersheds, habitat and stock monitoring, and adaptive management monitoring, research, assessment and application.